

Title (en)
USE OF SUPPORTED IONIC LIQUID PHASE (SILP) CATALYST SYSTEMS IN THE HYDROFORMYLATION OF OLEFIN-CONTAINING MIXTURES TO GIVE ALDEHYDE MIXTURES WITH A HIGH PROPORTION OF 2-UNBRANCHED ALDEHYDES

Title (de)
EINSATZ VON SUPPORTED IONIC LIQUID PHASE (SILP) KATALYSATORSYSTEMEN IN DER HYDROFORMYLIERUNG VON OLEFINHALTIGEN GEMISCHEN ZU ALDEHYDGEMISCHEN MIT HOHEM ANTEIL VON IN 2-STELLUNG UNVERZWEIGTEN ALDEHYDEN

Title (fr)
UTILISATION DE SYSTÈMES DE CATALYSEURS SILP (SUPPORTED IONIC LIQUID PHASE) DANS L'HYDROFORMYLATION DE MÉLANGES CONTENANT DES OLÉFINES POUR FORMER DES MÉLANGES D'ALDÉHYDES PRÉSENTANT UNE TENEUR ÉLEVÉE EN ALDÉHYDES NON RAMIFIÉS EN POSITION 2

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Abstract (en)
[origin: WO2012041846A1] The present invention provides a composition comprising: a) an inert porous support material, b) an ionic liquid, c) a metal selected from group 9 of the Periodic Table of the Elements, d) a phosphorus-containing organic ligand, e) at least one organic amine. The present invention further provides a process for hydroformylating olefin-containing hydrocarbon mixtures to aldehydes with addition of the inventive composition as a catalytically active composition, wherein: a) the water content of the olefin-containing hydrocarbon mixture is adjusted to not more than 20 ppm, b) the content of polyunsaturated compounds in the olefin-containing hydrocarbon mixture is adjusted to not more than 3000 ppm, c) a molar ratio of organic amines according to claims 10-13 to phosphorus-containing organic ligands according to claims 8-9 of at least 4:1 is established, d) a molar ratio of phosphorus-containing organic ligands according to claims 8-9 to rhodium of at least 10:1 is established.

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